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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/586,994	03/20/2007	Teunis Abram Klijn	00307.0045.PCUS00	9248
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HOWREY LLP-HN C/O IP DOCKETING DEPARTMENT 2941 FAIRVIEW PARK DRIVE, SUITE 200 FALLS CHURCH, VA 22042-7195			EXAMINER ROBINSON, ELIZABETH A	
			ART UNIT	PAPER NUMBER
			1787	
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			09/01/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,994	<b>Applicant(s)</b> KLIJN ET AL.	
	<b>Examiner</b> Elizabeth Robinson	<b>Art Unit</b> 1787	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 10-21 is/are pending in the application.
- 4a) Of the above claim(s) 10-18 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 19 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-7, 19 and 21 are currently being examined.

### ***Specification***

The amendment to the specification filed June 23, 2010 is approved.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.** The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. For support for the amendment to this claim, Applicants point to page 8, lines 12-13, but this appears to refer to the dispersant to modify the hydrotalcite which is used in amount of about 1%. For the dispersing agent for the composition, it is disclosed (page 13, lines 13-19) that the amount is based on the total weight of the composition, not total weight of solids.

**Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 21 recites the limitation "wherein the layered double hydroxides" in line 2. There is insufficient antecedent basis for this limitation in the claim. There are no layered double hydroxides claimed in claim 1 from which this claim depends.

***Claim Rejections - 35 USC § 102***

**Claims 1-7, 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Rohrbaugh et al. (US 2002/0028288) in view of evidence provided by Bejoy (Hydrotalcite article).**

Regarding claims 1-3, 19 and 21, Rohrbaugh (abstract) teaches coating compositions comprising a nanoparticle system that can provide anti-soil deposition (stain blocking). The nanoparticles (Paragraph 53) can be hydrotalcite. As evidenced by Bejoy (Page 57), hydrotalcite is inorganic anionic clay and has a layered structure with a crystal structure with positively charged layers (Box 1, Page 58) and is a layered double hydroxide (LDH). The coating composition (Paragraph 252) can comprise the nanoparticles, an aqueous carrier medium (water borne) and polymers (organic binder). Since the modification of the LDH is optional, the presence of the nanoparticles meets the limitations of claims 19 and 21. The coating composition can comprise the nanoparticles at less than or equal to about 50% by weight of the coating composition (Paragraph 81). The coating composition can comprise adjunct materials at about 0.01

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to about 99.99% by weight of the coating composition (Paragraph 91). The adjunct materials include polymers (organic binders) (Paragraph 252).

Regarding claim 4, the water borne coating can comprise polymeric materials adsorbed on the nanoparticles (Paragraph 116). The nanoparticles are dispersed in the water borne coating and thus, the polymer is a dispersion in the aqueous carrier medium. The polymer can be a polymer formed from monomers of (meth)acrylate esters of fluorinated alkyl groups (acrylic polymers).

Regarding claim 5, the coating can also comprise additives including many of the additives of the instant claim (Paragraph 252).

Regarding claim 6, the water borne coating can be a clear coat composition (Paragraph 264).

Regarding claims 7, 19 and 21, the coating composition can also comprise a dispersing agent at about 0.01 to about 5% by weight of the coating composition (Paragraphs 70, 88, and 89). Since the coating composition also comprises water, the weight percentage of dispersing agent, based off of just the solids in the composition, would be even higher than the 0.01 to about 5% by weight and meets the claimed limitation.

### ***Response to Arguments***

Applicant's arguments filed June 23, 2010 have been fully considered but they are not persuasive.

Applicant argues that Rohrbaugh et al. (US 2002/0028288) fails to disclose an aqueous coating composition comprising water and a binder. Applicant further argues that the only Example coating composition of Rohrbaugh comprising a binder is not an aqueous coating composition, but a solvent borne composition. However, “applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others.” In re Courtright, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). Rohrbaugh (Paragraph 252) teaches that the coating composition can comprise the nanoparticles, an aqueous carrier medium (water) and adjunct materials such as polymers (binder). Regarding the amount of polymer and nanoparticle, the ranges for these components fully encompass the claimed ranges. Rohrbaugh (Paragraph 109) further teaches that water provides a suitable carrier medium due to its low cost, availability, safety and compatibility. Thus, Rohrbaugh clearly teaches water as a suitable carrier medium.

Applicant argues that Rohrbaugh only discloses a single positively charged clay material from a long list of nanoparticle material and thus, does not anticipate the claims. However, when a species is clearly named, the species claim is anticipated no matter how many other species are additionally named. *Ex parte A*, 17 USPQ2d 1716 (Bd. Pat. App. & Inter. 1990) MPEP 2131.02.

Applicant argues that the use of hydrotalcite is in disagreement with the overall teachings of Rohrbaugh, but provides no reasoning why the use of that clay is in disagreement with the teachings. Since it is a disclosed choice for the nanoparticle material, the Examiner maintains that it is within the teachings of Rohrbaugh.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., preventing or limiting chemicals leaching out into the coating from within the substrate) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Due to amendments to the specification, the specification objection from the March 25, 2010 Office Action is withdrawn.

Due to amendments to claims 7 and 21, the 35 U.S.C. 112, second paragraph rejections from the March 25, 2010 Office Action are withdrawn. However, the amendment to claim 7 raises a new 112 first paragraph rejection for lack of written description and the amendment to claim 21 raises a new 112 second paragraph rejection due to lack of antecedent basis as stated above.

Regarding Applicant's request for a telephonic interview, in order to act on the application in a timely manner, this Office Action is being set forth. Should Applicant desire a telephonic interview, the Attorney is welcome to telephone the Examiner to set up a time for an interview. It is noted that the Examiner does not have authorization to place an international call.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Robinson whose telephone number is (571)272-7129. The examiner can normally be reached on Monday- Friday 8 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on 571-272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. R./  
Elizabeth Robinson  
Examiner, Art Unit 1787

August 25, 2010

/Callie E. Shosho/  
Supervisory Patent Examiner, Art Unit 1787